

### **Remarks/Arguments**

#### **Rejection under 35 USC § 102(b) by McNergney et al**

Claims 1-3, 5-7, and 32-34 stand rejected under § 102(b) by McNergney et al. As amended, claim 1 is directed to a resistance system for an exercise machine which includes (a) a plurality of resistance providing members having at least three different values of resistance; (b) a selector for selecting sets of resistance providing members from the plurality of resistance providing members, the values of the resistances for a selected set determining the total resistance of the resistance system when the selected set is selected, and (c) a controller circuit for automatically controlling the selector to change the total resistance of the resistance system upon occurrence of a predetermined condition, such as MMF. McNergney et al is directed to a system in which the values of resistance are manually changed and therefore totally lacks the required element of a controller which automatically controls the selector to change the total resistance upon occurrence of a predetermined condition such as MMF. The Examiner has cited another reference, the Scaramucci patent, against other claims, which has an electronic controller. The Scaramucci patent, however, appears to have only a single value of resistance (the individual weights 2 of the apparently conventional weight stack). Moreover, the Scaramucci system would appear to work only with a conventional weight stack, relying as it does on the carriage pin 4 which carries the selected weights (and only the selected weights). The McNergney et al. reference does not have a conventional weight stack, so it would be impossible (and hence not obvious) to combine the controller of Scaramucci with the resistance providing members of McNergney et al. For all these reasons, claim 1 is allowable over the cited art.

Claims 2 and 3 depend from claim 1 and are allowable therewith. In addition, claim 2 requires that the resistance members have at least four different values of resistance. As the Examiner recognizes in the Office action, McNergney et al. has three different values of resistance, not four as required by this claim. With the McNergney et al. device a total of 15 different resistances may be selected (from five (5) pounds up to 75 pounds at five pound increments). In contrast, with the claimed resistance members having at least four different values of resistance, 25 different resistances with the same increments could be selected. Moreover, with the presently claimed invention, the actual selection of these different resistances is much easier since it is accomplished by the controller. In McNergney et al. adding additional resistances complicates the selection of the desired resistance because it requires the user to now manually set five (or more!) actuators to obtain the desired resistance. Claim 2 is further allowable for all these reasons.

Claims 5-7 all relate back to claim 1 and are allowable therewith. In addition, claim 6 provides that the selector is a substantially flat plate disposed along one surface of the resistance providing members. This plate is plate 33 (shown in Fig. 2). The McNergney et al. reference completely lacks such a flat plate selector. Nor does it have such a selector "disposed along one surface of the resistance providing members". In fact, it is not clear what the quoted language would refer to in the context of a McNergney et al. type device. Claim 6 is allowable for these reasons as well. Note that the Scaramucci reference also lacks such a flat plate selector.

Claim 32 is an independent claim which, as amended, requires a controller for changing the selected set of resistance providing members to change the total resistance (similar to claim 1). As discussed above in connection with claim 1, this provides a feature and advantages that

are totally absent from the McNergney et al. reference. Claim 33 depends from claim 32 and is allowable therewith. Claim 34 is canceled herewith.

**Rejection under 35 USC § 102(b) by Scaramucci**

Claims 12, 15, 18-22, and 25-31 stand rejected under § 102(b) by Scaramucci. Claims 12 and 26 are cancelled herewith. The content of claim 12 is currently in claim 1, discussed above. The content of claim 26 is currently in claim 22, discussed below.

Claim 15 is directed to a resistance system for an exercise machine comprising (a) a plurality of resistance providing members disposed horizontally with respect to each other; (b) a selector adapted to select sets of resistance providing members from the plurality of resistance providing members, the values of the resistances for a selected set determining the total resistance of the resistance system when said selected set is selected; and (c) a controller automatically controlling the selector to change the total resistance of the resistance system upon occurrence of a predetermined condition, such as MMF.

The Scaramucci reference has a conventional weight stack in which the resistance providing members (weights 2) are disposed vertically, not horizontally with respect to each other. Claims 18-21 depend from claim 15 and are allowable therewith. In addition, claim 18 provides that the resistance members are disposed horizontally in such a way that the distribution of resistances about a central axis of the selector is substantially symmetrical. Scaramucci, lacking the horizontal disposition of the resistance providing members, lacks this feature as well. Claim 19 provides that the selector is a substantially flat plate which, as discussed above, is not true of the cited art, including Scaramucci. Claim 21 further provides that the flat plate selector

extends horizontally above the resistance providing members. That feature, as well, is completely missing from Scaramucci.

Claim 22 is an independent claim directed to a resistance system for providing a controllable resistance for an exercise having: (a) a plurality of selectable weights, each of said plurality of weights being selectable to be included in the controllable resistance; and (b) a selector disposed adjacent each of the selectable weights, said selector including a plurality of actuators corresponding to each selectable weight such that when one of the actuators is actuated the corresponding selectable weight is included in the controllable resistance, in which (c) the selector comprises a substantially flat plate disposed along one surface of the weights. As discussed above, Scaramucci does not have a flat plate selector. Nor does it have such a selector disposed along one surface of the weights. Claim 22 is allowable for all these reasons.

Claims 25 and 27-31 all relate back to claim 22 and are allowable therewith. In addition, claim 28 provides that the selector plate is disposed horizontally above the weights—a feature that is completely absent from Scaramucci.

#### **Rejection under 35 USC § 102(e) by Ripley—claim 38**

Claim 38 is rejected as anticipated by Ripley. That claim is directed to a resistance system for providing a controllable resistance for an exercise comprising: (a) a plurality of selectable weights, each of said plurality of weights being selectable to be included in the controllable resistance; (b) a selector disposed adjacent each of the selectable weights, said selector including a plurality of actuators corresponding to each selectable weight such that when one of the actuators is actuated the corresponding selectable weight is included in the controllable resistance; and (c) a base for receiving the weights, said base having a plurality of

tapered openings, there being a tapered opening for each of said weights for receiving the weights. Ripley may show a base with two tapered openings, but it completely fails to show the claimed base which has a tapered opening for each of said weights. That fact highlights the completely different nature of the present invention from Ripley.

**Rejection under 35 USC § 103(e) over Ripley—claim 39**

Claim 39 stands rejected as obvious over Ripley. Claim 39 provides for a set of weights for a piece of exercise equipment comprising; (a) a first weight having a bottom, a top and sides, the sides having at least some taper toward the bottom of the first weight, the first weight having a predetermined mass; (b) a second weight having a bottom, a top and sides, the sides having at least some taper toward the bottom of the second weight, the second weight having a mass approximately twice the mass of the first weight; and (c) a third weight having a bottom, a top and sides, the sides having at least some taper toward the bottom of the third weight, the third weight having a mass approximately four times the mass of the first weight. The Examiner notes that Ripley does not disclose the required mass relationships of this claim. This feature is important because it allows various weights, at defined, fixed increments, to be provided to the user by mixing and matching the various weights of different masses. Ripley has a very different approach. Providing a fixed increment increase in weight in Ripley would appear to require considerable effort on the part of the user to calculate which weights to use. Ripley would appear to provide an weight increment that varies, rather than one that is fixed.

**Rejection under 35 USC § 103(e) over Scaramucci in view of Mabry et al**

Claims 1, 11-13, 15-17 and 22-24 stand rejected under § 103 over Scaramucci (in view of Mabry et al.). The inapplicability of Scaramucci to claim 1 is discussed above. Mabry et al., like Scaramucci, discloses a weight stack—the Mabry et al. weight stack having weights of two different values. Adding a third weight value to the Mabry et al. is of limited use, since with a conventional weight stack **all the weights** above the selected weight are included in the resistance of the system. The present invention, by way of contrast, provides for “selecting **sets** of resistance providing members from the plurality of” members to provide the desired resistance. The conventional weight stack arrangements of Scaramucci and Mabry et al. simply disclose neither the need for other resistance values nor the huge advantages that flow therefrom.

Claims 11 and 13 depend from claim 1 and are allowable therewith. Claim 12 has been cancelled. Claim 15 is an independent claim which also requires the selector which selects “sets of resistance providing members”, as discussed above. Claims 16 and 17 depend from claim 15 and are allowable for the same reasons as that claim. In addition, claim 16 provides for four different values of resistance, which provides a flexibility in weight choice which is simply unattainable with a conventional weight stack system like Scaramucci and Mabry et al. Claim 17 further defines ratios among the resistance values, which again is of little use or interest in a Scaramucci/Mabry et al. type machine.

Claim 22 as currently amended (and as discussed above) requires that the selector comprise a substantially flat plate disposed along one surface of the weights. As mentioned above, Scaramucci completely lacks this feature. Similarly, Mabry et al. uses a lock member 114 (a pin) to insert into the weight stack in the conventional manner. The invention of claim 22

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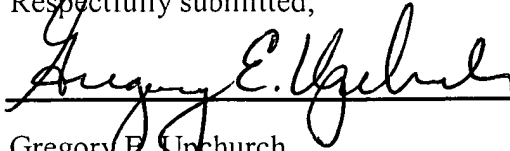
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is simply neither shown nor suggested in this art. Claims 23 and 24 depend from claim 22 and are allowable therewith. These claims further define the relationships between the weight values, a feature which (as discussed above) is of no interest in a Scaramucci/Mabry et al. type apparatus. These claims are allowable for these reasons as well.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Gregory E. Upchurch", is written over a solid horizontal line.

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